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#### **REMARKS**

In view of the following remarks, Applicant respectfully requests reconsideration and allowance of the subject application. This Response is believed to be fully responsive to all issues raised in the Final Office Action mailed August 19, 2010.

Clarifying amendments are made to independent claims 1, 10, 23, 32 and 45. Specifically, the phrase "along a line" is inserted before "between" to clarify that the term "between" has its ordinary meaning (i.e., "a point intermediate two other points in space", e.g., per Collins English Dictionary as attached hereto). Claims 1-3, 5-13, 15-21, 23-25, 27-42 and 45-46 are pending.

### Statement as to Substance of Examiner Interview of October 14, 2010

Applicant graciously appreciates the Examiner's and his Supervisor's time and participation in an Interview of October 14, 2010 where the intended definition of the word "between" was discussed. Also discussed was the passage 104 of the Mayleben reference, which is configured for receipt of a power cord for operation of the water sump pump described therein. In FIG. 16 of the Mayleben reference, it appears that a power cord in the passage 104 may come into contact with sharp corners (see also prior art Figs. 10 and 11 of the instant application). As mentioned, the claimed arrangement aims to overcome short circuiting of a power cord that contacts sharp corners.

As indicated during the Interview, Applicant now amends all of the independent claims to insert "along a line" before "between" to clarify that the term "between" has its ordinary meaning, i.e., "a point intermediate two other points in space" (see also MPEP §2111.01 "Plain Meaning").

## Request for Entry of Clarifying Amendments After Final

Per MPEP §714.13, entry of an amendment in response to a Final Office Action is not a matter of right except where the "amendment merely cancels claims, adopts examiner suggestions, removes issues for appeal, or in some other way

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requires only a cursory review by the examiner". Applicant respectfully requests that the clarifying amendments be entered as they merely clarify the intended meaning of the term "between".

# 5 Rejections under §103

In the Office Action of August 19, 2010, the Office rejected claims 1-3, 5-13, 15-21, 23-25, 27-42, 45 and 46 under §103 as being unpatentable over Allen (US 6449950) in view of Mayleben (US 6443715).

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Per MPEP §2106: "Limitations appearing in the specification but not recited in the claim should not be read into the claim".

Per MPEP §2141.02: "In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention <u>as a whole</u> would have been obvious." (emphasis in original)

Per MPEP §2143.02: "A rationale to support a conclusion that a claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed <u>by known</u> methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art." (emphasis added)

Per MPEP §2141.01(a): "Under the correct analysis, any need or problem known in the field of endeavor at the time of the invention and addressed by the patent [or application at issue] can provide a reason for combining the elements in the manner claimed."

Response to Rejections: Lead Wires and Short Circuit Risk

In Applicant's last two responses, Applicant respectfully directed the Office to the instant application at page 3, which describes problems solved and advantages of the particular exemplary configurations; specifically, (a) simplification to alleviate a Response to Final OA of August 19, 2010 Ser. No. 10/567,509

need to thread lead wires, "for the power connection of the electric motor through one or more holes of the center housing" and (b) to alleviate a "need to pass boundary conditions for the guidance of the lead wires, e.g. like sharp edges, at which a short circuit of the lead wires may occur".

At page 4, the instant application further states: "The use of the printed circuit board makes it possible to easily connect the main power plug connectors to the housing plug connectors while minimizing a short circuit risk". The instant application explains that prior approaches relied on wires for supplying "electrical energy and control signals to the electric motor" (see page 7, lines 29-30 of WO 2004/093294, which is the publication of PCT/EP03/03934 cited at page 1 of the instant application). Applicant further notes that PCT/EP03/03934 cites US 6449950 to Allen et al. Fig. 1 of the Allen reference shows an opening in Fig. 1, which is unlabeled and adjacent one of the bolts 26. Such an opening is akin to the opening (see item 20) of the PCT/EP03/03934 application. Applicant finds no evidence in the Allen reference to suggest use of a circuit board that "makes it possible to easily connect the main power plug connectors to the housing plug connectors while minimizing a short circuit risk".

In the pending Final Office Action, at page 3, the Office admits that Allen et al. (US 6449950) "fail to disclose the specific location of the circuit board". Applicant notes that the Allen reference does not include the term "circuit board". The Office then contends that Mayleben et al. teach a pumping apparatus that includes a circuit board. Further, the Office states that the circuit board is "between the volute (12) and the compressor wheel (26)"; for reasons explained further below, Applicant does not agree. Yet further, the Office states that given the Allen reference and the Mayleben reference, one would:

modify the pump of Allen et al by installing a circuit board inside the compressor housing and relocating the motor plug connector at the axial side facing the compressor housing as taught by Mayleben et al since it facilitates assembly due to the fact that all the electronic components can all be integrated and installed on the PCB which is easily accessible from an axial side during assembly/disassembly.

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The foregoing problem and solution set forth by the Office at page 3 of the pending Final Office Action seem to be taken from the Mayleben reference and <u>not</u> the instant application. As mentioned in Applicant's response of June 28, 2010, the Mayleben reference does <u>not</u> address the power supply issues described in the instant application and further the Mayleben reference does not provide any evidence to teach or suggest "minimizing a short circuit risk".

Indeed, the passage 104 of the motor cover E of the Mayleben reference is for receipt of a power cord that "supplies power to motor stator D" (see col. 5, lines 7-8). The "connectors" of the Mayleben reference do not alleviate use of a power cord or wires inside the housing and they do not appear in any manner to minimize short circuit risk. As explained in Applicant's prior response, the power cord of the Mayleben reference must snake through the passage 104 where it will be subject sharp edges and vibration energy associated with operation of the <u>water sump pump</u>. Logically, this is probably why the motor cover E has a fitting around the opening to the passage 104 (i.e., to prevent entry of water where a frayed power cord or bare wires or bare connections could result in failure of the motor).

In summary, Applicant submits that the underwater sump pump of the Mayleben reference does not teach or suggest, in combination with the Allen reference, the claimed subject matter. The underwater pump of the Mayleben reference has a particular design for a particular purpose (see, e.g., col. 7 at lines 3-11) that finds no parallel in turbochargers (see, e.g., MPEP §2141.01(a)).

Response to Rejections: Mayleben Circuit Board is <u>Not</u> Between Volute and Wheel In Applicant's response of June 28, 2010, Applicant pointed to various evidence in the Mayleben reference (US 6443715) to demonstrate that such evidence was insufficient to support the Office's rejections under §103. Applicant reiterates the evidence and arguments as if set forth fully herein.

At page 17 of the pending Final Office Action ("Response to Arguments"), the Office states:

Mayleben et al in figure 1 disclose a circuit board (131) between the volute (12) and the compressor wheel [impeller C]. Please note that the conical part 15 [cone nut 15] is considered to be part of the wheel

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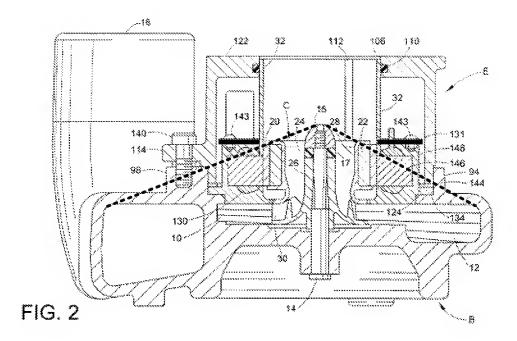
[impeller C] and thus the circuit board [131] is located in between the volute [12] and the wheel [impeller C] both axially and radially.

As discussed in the Interview of October 14, 2010, the clarifying amendments aim to ensure that the term "between" has its ordinary meaning and not any alternative meaning such meanings achieved by addition of the adverbs "axially" and "radially" (see, e.g., MPEP §2106). Applicant supplements the prior submitted evidence and arguments to enhance clarity, in part, by representing Fig. 2 of the Mayleben reference with markings.

Fig. 2 of the Mayleben reference is reproduced below with additional markings for clarity to demonstrate that the circuit board 131 is not located <u>along a line between</u> the volute 12 and the cone nut 15 that secures the impeller C.

The term "between", as used in the claims, means at a point intermediate to two other points in space. In other words, a simple line test can determine whether an object is located <u>between</u> two other objects. For support, please see definition entry 1 for "between" as provided by the Collins English Dictionary (on-line edition), which is attached hereto. Again, the clarifying amendments make this explicit: "disposed . . . <u>along a line between</u>".

At col. 3, lines 13-14, the Mayleben reference states: "FIG. 1 shows a pump base B having a pinched vaneless diffuser 10 and a volute 12 therein." The volute 12 is defined by the base B, just as in the claims, the volute is defined by the compressor housing. For example, per claim 1 "a volute of the compressor housing". Thus, using the accepted definition of "volute", it can be readily demonstrated that the circuit board 131 is not located between the volute 12 and the impeller C or the cone nut 15. For example, as reproduced below, Fig. 2 of the Mayleben reference shows the circuit board 131 highlighted via solid filled rectangles and dashed lines drawn from the cone nut 15, which secures the impeller C, to points of the volute 12. These lines do not pass through the circuit board 131. Consequently, the circuit board 131 is not between the cone nut 15 and the volute 12.



Indeed, given Fig. 2 (or Fig. 1) of the Mayleben reference, no line can be drawn from a point on the cone nut 15 to a point of the volute 12 that intersects the circuit board 131. For at least this reason, Applicant submits that the evidence in the Mayleben reference is insufficient to support a *prima facie* case of obviousness.

## Conclusion

For at least the foregoing reasons, pending claims 1-3, 5-13, 15-21, 23-25, 27-42 and 45-46 are believed to be in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the present application. Should any issue remain that prevents immediate issuance of the application, the Examiner is encouraged to contact the undersigned attorney to discuss the unresolved issue.

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Respectfully Submitted,

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Dated: October 14, 2010 /Brian J. Pangrle/

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